

Remarks

Claims Rejections - 35 USC 102(b)

Claims 1, 3, 4, 36, 37, 43 and 44 stand rejected as being anticipated by the patent to Hyatt.

Valid rejection under 35 USC 102 requires that each feature of a rejected claim be disclosed in a single reference. "For anticipation under 35 USC 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present." MPEP 706.02(a)

The features of claims 38 and 41 have been added to claim 3.

The features of claims 42 have been added to claim 4.

Hyatt does not disclose or suggest each feature of the rejected claims, as now amended.

The Examiner mainly recites Fig. 16F of Hyatt. This was found to be explained in Hyatt at col. 55, line 48 to col. 59, line 11, but mainly in col. 55 and 56.

The optical element 1610/1620 recited is a rectangular block mirror element of a special "IAD" type. By a layer 1630 of bonding material (col. 46, lines 10-11) the optical element is attached to case 1632. Hyatt teaches nothing about the geometry of the bonding, only the drawing, which is highly schematic, can be consulted for such. The drawing shows that the layer 1630 covers the full back surface of optical element 1620. Both are rectangular and thus of the same symmetry.

Moving to the different disclosure of Fig. 16B does not change the situation: here also everything is rectangular. The only difference is an added frame 1622 in front of optical element 1610/1620.

The text gives no hint about adaptation of the cooling arrangement to a light exposure. As the IAD optical element 1610/1620 is understood to create differing “image” lights of the sort shown in Fig. 13, such adaptation would not be possible by a stationary geometrical/mechanical layout.

Consequently, Hyatt neither shows the claimed feature of a “connecting structure between said optical element and said mount having a symmetry characteristic that does not correspond to the shape of the optical element”, but just the opposite, nor provides any hint of the idea of cooling adapted to a light cross section.

To make the difference over Hyatt more evident, claim 1 has been amended to read “characteristic that substantially does not correspond...” (last line of claim 1).

The original disclosure for this change is at least found from the immediate understanding of the specialist in the art from the comparison of Fig 5a/5b discussed with respect to rejection under 35 USC 103(a).

Therefore, Hyatt does not anticipate the present invention.

Claim rejections - 35 USC 103 (a)

Claims 1-12, 17-35, 43 and 44 are rejected as being unpatentable over Unno in view of Nishi et al (Nishi).

Unno combined with Nishi do not render Applicants’ claims unpatentable.

In Fig. 2 of Nishi, reference numerals G1, G2, are described at col. 11, line 22 to col. 12, line 22. G1, G2 are identified as “lens frames” and nothing is described about their geometry.

Only col. 11, line 39, provides information concerning their geometry: “a gas chamber enclosed by the lens elements 33, 34 and the lens frame G1 is sealed, ...”.

Lenses are rotationally symmetrical, so generally are the lens barrels 4. The frames G1, G2 in order to seal chambers then must be annular parts. This is a widespread basic form of lens moments. The existence of small bores/tubes through the frames G1, G2 does not change this except theoretically. Deviation from rotational symmetry is too small for all mechanical and thermal effects. The word "corresponding" in claim 1 is understood to incorporate such mirror deviations from the exact matching c.f. discussion of Figs. 5a/5b in [0039] f.f.

Nishi in no way addresses cooling of lenses, and any deviations from a rotational symmetric shape of lens frames G1, G2 is only motivated by the demand for gas supply holes. It is not evident that G2 has such bores in the mountings shown as hatched cross sections. Simple holes in lens tube 4 look the same in the cross section and are identical in effect with G2 combined of 4 separate annular mountings.

The referenced patent to Unno in this Office Action is the US counterpart of EP-A 0 678 768, originally cited in the specification of the present application, paragraph [0004]. Paragraph [0004] is replaced by new paragraph [0004] to clarify that the cited European patent to Unno originally cited in the specification corresponds to the US Patent to Unno cited in this Office Action.

On page 4 of the Office Action the Examiner properly indicates that Unno does not disclose a "mount having a symmetry characteristic that does not correspond to the shape of the optical element".

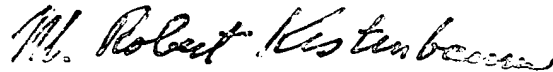
Unno is diametrical to the idea of passive thermal compensation and hence gives no suggestion at all for a combination of Unno and Nishi as suggested in the Office Action.

None of the cited references addresses passive cooling of optical elements adapted to the geometry of their exposure, and hence all the claims currently on file remain novel and non-obvious.

A two-month extension of time in which to respond to the outstanding Office Action is hereby requested. Credit Card Payment Form PTO-2038 is enclosed to cover the prescribed Large Entity two-month extension fee of \$410.00. Please charge any additional fees or credit any overpayments to Deposit Account 11-0665. A duplicate of this page is enclosed for this purpose.

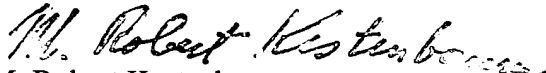
Wherefore, further consideration and allowance of the claims in this application is respectfully requested.

Respectfully submitted,



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I hereby certify this correspondence is being deposited with the U.S Postal Service as a first class mail in an envelope with adequate postage addressed to PO Box 1450, Commissioner for Patents, Alexandria, VA 22313 on June 13, 2003.



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